

Seminar Kebangsaan kali ke IV

MAJLIS DEKAN PENDIDIKAN IPTA 2013

MEMACU PELAN TRANSFORMASI PENDIDIKAN



PROSIDING



23 - 25 September 2013

Universiti Islam Antarabangsa Malaysia (UIAM),
Gombak, Kuala Lumpur

ANJURAN :

Majlis Dekan Pendidikan IPTA Malaysia
dengan kerjasama Institut Pendidikan (INSTED), UIAM



Published by:

Institute of Education,
International Islamic University Malaysia,
P.O. Box 10,
50728 Kuala Lumpur,
MALAYSIA
Tel. : +6 03 - 6196 5331 / 5333
Fax. : +6 03 – 6196 4851

ISBN 978-967-12405-0-2



ISI KANDUNGAN

PENDAHULUAN

Yang Berhormat Dato' Seri Idris Bin Jusoh Menteri Pendidikan II, Malaysia	I
Prof. Dato' Sri Dr. Zaleha Kamaruddin Rektor, Universiti Islam Antarabangsa Malaysia	II
Prof. Dr. Rosnani Hashim Dekan, Institut Pendidikan, UIAM	III
Prof. Dato' Dr. Abdul Rashid Mohamed Pengerusi Majlis Dekan Pendidikan IPTA	IV
Prof. Madya Dr. Hairuddin Mohd Ali Pengerusi, Seminar Majlis Dekan Pendidikan IPTA Kali ke IV 2013	V

KERTAS KERJA

A Teacher Certification Program in Indonesia: Teachers' Perspectives ID #1 Bambang Sumintono, Nanang Bagus Subekti, Chairil Anwar Korompot, Hamdan Said	1 - 19
Tret Personaliti Pengetua Dan Guru Besar Novis Di Malaysia ID #3 Dr Shariffah Sebran Jamila Bt Syed Imam, Dr Mohameed Sani Hj Ibrahim, Prof. Madya Dr Mohd Izham Hamzah, Prof. Madya Dr Hairuddin Mohd Ali	20 – 31
Kaedah Fonik Dalam Mengajarkan Kemahiran Membaca Kanak-Kanak Prasekolah: Tinjauan Pelaksanaan Di Negara Brunei Darussalam ID #4 <i>Sutinah Hj Muhd Ali, Yahya Othman (PhD), Zamri Mahamod (PhD)</i>	32 - 50
Pemilihan Pelajar Sekolah Menengah Rendah Ke Aliran Sains ID #5 Aziz bin Nordin, Intan Bidayu binti Mohd Rafi, Nor Jamayah binti Daud	51 - 62
Amalan Pengajaran Guru Bahasa Melayu Berdasarkan Persepsi Murid ID #7 Abdul Rasid Jamian, PhD, Shamsudin Othman, PhD, Nor Syafiqah Mohd Zain	63 - 73
Exploring Malaysian University Students' Awareness of Green Computing ID #8 Tunku Badariah Tunku Ahmad, Abdullahi Bello, Mohamad Sahari Nordin	74 - 99
Transformasi Pembinaan Instrumen Kajian Terhadap Pengurusan Pengajaran Guru ID #11 Prof. Dr. Mohd Sahandri Gani Bin Hamzah, Prof. Madya Dr. Noor Shah Saad, Husni Zaim Khairun Nasri, Nur Nazurah Mat Yusof	100 - 113
Exemplary Post Graduate Programs in the Department of Arabic Language and Literature: Aspirations and Constraints DI #12 Muhamadul Bakir Hj. Yaakub, Nor Syarif Uwais	114 - 124

The Importance of Islamic literature curriculum: a perspective study on its relevance to contemporary social	125 - 138
ID #13 Muhamadul Bakir Hj. Yaakub, Musa Saeed Taha Idris	
Teaching Arabic language in Islamic schools for Non-Arab: a Singaporean perspective	139 - 154
ID #14 Muhamadul Bakir Hj. Yaakub, Siti Rafiah Muhamad Ramlan	
Amalan Pengajaran Guru KAFA Dalam Pelaksanaan Pembelajaran Kelas Fardhu Ain (KAFA) di Negeri Kedah Darul Aman	155 - 169
ID #15 Mohd Isha Awang, PhD, Yaakob Daud, Phd, Yahya Don, PhD, Abd Latif Kassim, PhD	
Principal's Instructional Leadership And Teachers' Work Place Well-Being : A Comparative And Relationship Study Between Sekolah Menengah Agama Bantuan Kerajaan And Sekolah Menengah Agama Rakyat	170 - 181
ID #16 Mohd Nor bin Jaafar Ph. D, Mohamad Haris bin Shakroni	
School Administrators' and Teachers' Level of Awareness, Interests and Practices in Learning Culture	182 - 199
ID #17 Normah binti Lin, Hairuddin bin Mohd Ali	
Assessing Preservice Teachers' Problem Solving Abilities: A Case Study	200 - 210
ID #18 Wun Thiam Yew, Sharifah Norul Akmar Syed Zamri, Lim Hooi Lian	
A Comparative Study of Self Efficacy between Public and Religious School Students	211 - 225
ID #19 Siti Salwa Bte Md. Sawari, Norwati Bt Mansor (Dr.)	
Pemahaman tentang Falsafah Ibadat dan Pengalaman Mengajar Ibadat dalam Kalangan Guru-guru Pendidikan Islam Sekolah Rendah	226 - 241
ID #21 Fathiyah bt Mohd Fakhruddin , Nor Hayati bt Alwi	
Wisdom in Teaching Profession as a Best Career Choice: An Introspective Analysis	242 - 243
ID #22 Ibrahim Ali Allafiaji, Siti Rafiah Abd Hamid, Sharifah Sariah Syed Hasan, Suhailah Hussein, Nik Md Saiful Azizi	
School Teachers' Time Management In Classroom.	249 - 263
ID #23 Nor Ildahayati Binti Ilias, Hairuddin Bin Ali	
Kepatuhan Pengurusan Kewangan Di Sekolah Menengah Kebangsaan Harian Di Negeri Kedah	269 - 283
ID #25 Dr. Norazlinda Saad, Dr. Surendran Sankaran	
The Role of <i>al-Murabbi</i> in Society: Some Religious Viewpoints	287 - 292
ID #26 Ahmad Nabil bin Amir	
Humanistic Language Teaching: An Alternative Approach To Improve Students' English Language Proficiency	293 - 326
ID #27 <i>FaraSyuhadabinti Mad Isa</i>	
The Gap Between Primary And Secondary Schools Teachers In Followership Style At Adni Islamic School, Malaysia	327 - 355

ID #28	Ahmad Suhail Al-Anshory, Hairuddin Mohd. Ali	
	Amalan Penaksiran Dinamik Berasaskan Kurikulum Dalam Pengajaran Kemahiran Menulis Karangan Argumentatif: Penelitian Terhadap Dua Orang Guru Bahasa Melayu Tingkatan Dua	356- 377
ID #30	Marzni Mohamed Mokhtar, Roselan Baki, Fadzilah Abd Rahman	
	Relationship between Secondary Schools Agriculture Teachers' Motivation and Use of Contextual Teaching	378 - 391
ID #32	Siti Shuhaidah Abdul Latir; Ramlah Hamzah, Ph.D.; Abdullah Mat Rashid, Ph.D.	
	Using CFA for the Alternative Quality Assurance Evaluation Model (QAEM) For National Universities Commission (NUC) of the Federal Republic of Nigeria	392 - 417
ID #33	Bojuwon Yusuf Bolaji, Hairuddin Bin Mohds Ali	
	Persepsi Guru Terhadap Perlaksanaan Penilaian Prestasi dengan Komitmen Kerja dan Tahap Motivasi Guru	418 - 448
ID #34	Abdul Said Ambotang dan Susie Ivangella @ Doivit	
	Amalan pengurusan sumber manusia dan hubungannya dengan prestasi kerja dalam kalangan penolong pendaftar: kajian di Universiti Teknologi MARA	449 - 457
ID #35	Mohd Zahurin Ramli dan Norshidah Nordin	
	Pengaruh Dimensi Kepimpinan Instruksional Pengetua Terhadap Komitmen Kerja Guru di Sabah	458 - 472
ID #36	Muhamad Suhaimi bin Taat, Phd	
	Kemahiran Untuk Pekerjaan: Kajian <i>Grounded Theory</i> Sistem Latihan Perantisan Moden	473 - 447
ID #37	Ridzwan Che Rus, Ruhizan Mohamad Yasin	
	Pengaruh Kepimpinan Pengetua Ke Atas Amalan Prinsip-Prinsip Pengurusan Kualiti Menyeluruh (TQM)	448 - 488
ID #38	Rosnani Binti Kaman, Ishak Bin Sin, PhD, Abdull Sukor Bin Shaari, PhD, Hairudin Mohd Ali, PhD	
	Perbandingan Iklim Sekolah Antara Maktab Rendah Sains MARA	489 - 503
ID #41	Mohd Mahadzir Rahimi Bin Mohamed Nawi, Zulaine Bin Awang Taul, Dewi Isma Madzlan Bin Mazlan, Khalid Bin Johari	
	The Socioemotional Experiences of UAT's (UAT) During Teaching Practice: A Case of Reality Shock?	504- 529
ID #42	<i>Mohd Hasani Dali</i>	
	Pendidikan Berkualiti Melalui Pembelajaran Komuniti Lesson Study	530 - 539
ID #43	Zanaton H. Iksan	
	Pelaksanaan Pentaksiran Berasaskan Sekolah (Pbs) Dalam Kalangan Murid Bagi Mata Pelajaran Kemahiran Hidup Bersepadu	540 - 556
ID #44	Asnul Dahar Minghat, Mohd Saifulrizal Abd Manaf & Muhammad Khair Noordin	

Memartabatkan Pendidikan Vokasional: Kesedaran Terhadap Peluang Melanjutkan Pengajian ke ILV dalam Kalangan Pelajar SMV di Negeri Johor	557 - 567
ID #45 Noorazman, Razali Hassan, & Daziemah Daud	
Pelaksanaan Intervensi Cerita Sosial Oleh Guru Pendidikan Khas Dalam Meningkatkan Kemahiran Sosial Kanak-Kanak Autistik	568 - 610
ID #46 Siti Hodijah Bt Zamakshshari, Dr. Rosadah Bt Abdul Majid	
Islamic Integrated Curriculum (IIC) For The Transformation Of Islamic Education System In Malaysia	611 - 629
ID #47 Rahimah Embong, <u>Rosnani Hashim</u> , Yulsaini Yunus	
Amalan Kurikulum Bersepadu Dan Transformasi Pendidikan Di Malaysia	630 - 652
ID #48 Rahimah Embong, Wan Ismail Wan Abdullah, Normila Noruddin	
Pengurusan Berpasukan dan Budaya Kerja Guru Di Sekolah-sekolah Menengah Negeri Perlis	653 - 666
ID #49 Prof. Madya Dr. Tang Keow Ngang, Ooi Phaik Choo	
Pedagogi Berasaskan Pembelajaran Aktif dalam Amalan Pedagogi Rasulullah SAW	667 - 675
ID #50 Nooraida Yaakob, Rabiatul-Adawiah Ahmad Rashid	
Efikasi Pengajaran Guru: Perbandingan Di Antara Guru Dalam Perkhidmatan Dan Guru Pelatih	676 - 687
ID #51 Ahmad Zamri bin Khairani	
Kesan Keadilan Prosedur Sebagai Moderator antara Kesukaran Matlamat Dengan Komitmen Guru Kepada Sekolah	688 - 701
ID #52 Abdul Jalil Ali, PhD, Subarino	
Program 2Bs: Penerapan Dan Kesedaran Nilai-Nilai Universal Dan Pengetahuan Tentang Tingkah Laku Buli untuk Menangani Kejadian Buli Di Sekolah	702 - 710
ID #54 Jamalsafri Saibon, Abdul Jalil Ali, Syed Mohamad Syed Abdullah & Adawiah Abdul Rasyid	
Amalan Organisasi Pembelajaran dan Komuniti Pembelajaran Profesional Di Sekolah-Sekolah Berbeza Pencapaian Di Pulau Pinang	711 - 728
ID #56 Aziah Ismail, PhD, Najdah Baharom, Abdul Ghani Kanesan Abdullah, PhD	
Faktor-Faktor Yang Mempengaruhi Tahap Kesediaan Guru-Guru Tingkatan Satu Sekolah Menengah Dalam Pelaksanaan Penilaian Berasaskan Sekolah (PBS)	729 - 769
ID #58 Zuridah Hanim bt Md. Akhir, Cik Fatimah Nadia bt Che Hasnam, Mohd Sofian Omar-Fauzee, Yaakob Daud, Yahya Don, Abd Latif Kassim, Rozita Abd Latif, Nagoor Meera Abdullah	
Ideal Vs. Reality: Evidences From Senior Teachers' Experiences On The Malaysian School-Based Assessment System (SBA)	770 - 781
ID #61 Che Noraini Hashim, Adlina Ariffin, Nurhidayah Muhammad Hashim	

Do You Teach The Way You Were Taught? Graduate Teachers' Perceptions Of Their Undergraduate Teacher Preparation At The University	782 - 803
ID #62 Mwembesa Umar, Sharifah Sariah Syed Hassan, Che Noraini Hashim, Abdul Shakour Duncan Preece	
Animasi Interaktif Masa Depan, Pembelajaran Personal (Ple) Anak Orang Asli: Satu Kajian Fuzzy Delphi	804 - 826
ID #65 Mohamad Muhidin Patahol Wasli; Nur Azyma Ismail; Mimi Faizura Mohamad; Saedah Siraj; Zahra Naimie; Zaharah Hussin	
The Malaysian Education Blueprint(PPPM) 2013-2025: Unity Among Students	827 - 846
ID #66 Prof. Dr. Rosnani Hashim, Wirawani binti Kamarulzaman	
Sexual Harassment in The Workplace Environment: Psychological Impact To The Women	847 - 856
ID #67 Kamarulzaman Hj. Mohd. Jidi, Husin Junoh, Wan Azlinda Wan Mohamed, Warman, Nur Zakiah Hani Kamarulzaman	
Predicting English Oral Communication Skills Of Engineering Students From Usage Frequency And Self-Confidence Level	857 - 874
ID #68 <i>Maizam Alias, Nor Azura Osman, Marlina Mohamad</i>	
Kajian Kualiti Persekitaran Dalam Terhadap Reka Bentuk Studio Lukisan Kejuruteraan Ideal Di Sekolah Menengah Teknik	875 - 883
ID #69 Mohd Hanif Bin A Karim, <i>Azman bin Hasan</i> , Jamil Bin Abd Baser	
Pemeriksaan Kompetensi K-Pekerja Di Malaysia Menggunakan Pendekatan Pendidikan Integrasi Holistik; Penyepaduan Ilmu Wahyu (<i>Revealed Knowledge</i>) Dalam Sistem Latihan Dual Nasional (SLDN)	884 - 877
ID #70 Jailani bin Md. Yunos , Akhmal Annas bin Hasmori	
Tahap Kemahiran Profesional Guru-Guru Kemahiran Hidup Bersepadu Dalam Pelaksanaan Pentaksiran Berasaskan Sekolah (PBS)	878 - 905
ID #71 <i>Jamil Abd Baser, Azman Hasan, Rasidayanty Saidon, Noorazman Abd Samad, Khairuddin Harun, Ramlan Zainal Abidin</i>	
Strategies for Managing Stress for Optimal Job Performance	906 - 920
ID #72 Kamarulzaman Hj. Mohd. Jidi, Husin Junoh. Nur Zakiah Hani Kamarulzaman	
Importance Of Communication In Developing Performance Organization Of A Point Of View As Manager	921 - 927
ID #73 Kamarulzaman Hj. Mohd. Jidi, Husin Junoh, Sapon Ibrahim, Suraya Kamarulzaman	
Menentukan Faktor-Faktor Pemilihan Kerjaya Perguruan Dalam Kalangan Pelajar Sarjana Pendidikan Teknik Dan Vokasional Di UTHM	928 - 941
ID #74 Azman Hasan, Jamil Abd Baser, Noraliza Rajibi, Noorazman Abd Samad, Khairuddin Harun, Ramlan Zainal Abidin	
If You Think PBL Is Right for Your Students, Think Again.	942 - 956
ID #75 Lai Chee Sern, Razali Hassan, Kamarulzaman Hj. Jidi, Lee Ming Foong, Johnson Lim Soon Chong	

Interaksi dalam modul Sains mPembelajaran Kolaboratif (CmL): Implikasi kepada pembangunan pengetahuan	957 - 934
ID #76 Dorothy DeWitt, Saedah Siraj and Norlidah Alias	
Pendidikan Alternatif <i>Homeschooling</i> bagi kanak-kanak Orang Asli : Analisis Keperluan	935 - 1001
ID #78 Mohd. Nazri Abdul Rahman ,Norlidah Alias, Saedah Siraj & Dorothy Dewitt ^a ,	
Future Trends in the Management of School Finance	1002 - 1032
ID #79 Husaina Banu Kenayathulla	
Memperkasa Nilai Paling Utama Dan Memperkasa Nilai Interaktif Dalam Pendidikan UIAM	1033 - 1037
Prof. Dato' Dr. Sidek Baba	
Merealisasikan Penempatan Kepimpinan Berprestasi Tinggi Di Setiap Sekolah UM	1038 - 1094
Saedah Siraj, Mohammed Sani Ibrahim	
Better Teaching of Thinking Skills: Calling for an Academic Resilience Model of Malaysian Students	1095 - 1126
USM Shahabuddin Hashim, Seffetullah Kuldas, and Mohd Ali Samsudin	
Memacu Pelan Transformasi Pendidikan: Peranan IPTA Dalam Membantu Meningkatkan Kuantiti Dan Kualiti Pendidikan Aliran Sains Dan Teknikal Di Malaysia UTHM	1127 - 1142
Razali Hassan , Halizah Awang , Badaruddin Ibrahim , Siti Hajar Zakariah	
Teachers' Perception on Language Proficiency of Secondary School Students and Factors Contributing to Proficiency	1143 - 1167
UTM Mohd Salleh Abu, Zainal Abidin Zainuddin, Yeo Kee Jiar, Lu Xi, Azlina Mohd Kosnin	
Keperluan Penggunaan Modul Etika Kerja Guru dalam Membentuk Penghayatan Nilai Pelajar	1168 - 1186
UUM Prof. Madya Dr. Mohd Izam Ghazali, Dr. Mohamad Khairi Haji Othman, Alis Puteh, Dr. Mohd. Zailani Mohd Yusoff , Prof. Madya Dr. Fauziah Abdul Rahim	
Teacher Employment And The Open Market Saga Opportunity Beholds The New Breed Of Teachers And Hybrid Professionalism	1187 - 1195
MEDC Abdul Rashid Mohamed	
Accelerating Knowledge Production in East Asia: Implications for Strategic Research Development in Malaysian Universities	1196 - 1211
UCAP- Professor Philip Hallinger	
TAMA	



Bidang pendidikan dianggap faktor kritikal kejayaan dalam rangka kita hendak mencapai status negara maju dengan rakyatnya berpendapatan tinggi menjelang 2020. Ia merupakan penyumbang utama pembangunan modal insan dan ekonomi negara. Lantas bidang pendidikan diletakkan sebagai satu elemen penting transformasi dalam GTP dan ETP. Sebagai satu perancangan terancang kerajaan, ia bersifat inklusif yang merangkumi pelbagai bidang dan tahap pendidikan seperti pra-sekolah, sekolah rendah dan menengah, pra-universiti, kolej vokasional/politeknik, dan pendidikan di universiti. Pelancaran Pelan Pembangunan Pendidikan 2013–2025 ialah pernyataan jelas tekad kerajaan ke arah matlamat Malaysia pada alaf baru.

Melalui transformasi pendidikan diharap penambahbaikan drastik pendidikan tercapai dalam masa 12 tahun akan datang agar sistem pendidikan kita antara yang terbaik di dunia menjelang 2025. Pada ketika ini kita harap dapat melahirkan generasi muda yakni golongan modal insan alaf baru dari segi pegangan agamanya yang mantap, beretika, mahir dan cekap dalam pelbagai kerjaya, pengamal IT dalam segala urusan kerja dan komunikasi, berfikiran kreatif dan inovatif, tegas dan efektif dalam kepimpinan dan membuat keputusan serta bersifat patriotik terhadap negara kita Malaysia.

Saya ingin mengucapkan terima kasih dan setinggi-tinggi penghargaan kepada pihak penganjur iaitu Majlis Dekan Pendidikan IPTA istimewanya Universiti Islam Antarabangsa Malaysia selaku tuan rumah. Terima kasih kerana menjemput saya. Di kesempatan ini juga, saya ingin mengalu-alukan kehadiran semua pihak ke seminar ini dan berharap perjumpaan kita dapat memperkukuhkan silaturrahim sesama kita serta dapat mencapai objektif-objektif seminar ini. Insya Allah.

Yang Berhormat Dato' Seri Idris Bin Jusoh
Menteri Pendidikan II



Pendidikan ialah jantung pembangunan ummah. Matlamat pendidikan adalah untuk melahirkan insan yang boleh meningkatkan kualiti diri dan memberi sumbangan yang positif untuk komuniti, masyarakat dan negara. Melalui pendidikan yang holistik generasi muda dipupuk dan dibimbing agar mencapai kecemerlangan dalam mencari makna ihsan yang hakiki.

Pelan Pembangunan Pendidikan Malaysia 2013-2025 ialah dokumen Kementerian Pendidikan Malaysia yang dihasilkan secara teliti dan professional untuk mencapai taraf pendidikan yang unggul dan terbaik bagi Malaysia pada hari muka.

Salah satu peranan pendidikan adalah untuk menyelesaikan masalah. Dalam pendidikan, kita hadapi apa yang kita tahu, bagaimana nak tahu dan bagaimana menangani apa yang kita telah tahu.

Bagaimanapun pendidikan diperingkat global kian berubah secara dinamik kerana proses pendidikan itu sendiri bersifat malar dan “constant.” Oleh yang demikian pendidikan perlu bersifat tranformatif untuk menangani perubahan.

Transformasi bukanlah satu fenomena atau perancangan manusia yang asing dalam ajaran Islam dan kehidupan ummat manusia.

Diharap seminar ini memberi impak kepada transformasi pendidikan negara ini yang sedang menuju negara maju menjelang tahun 2020.

Prof. Dato' Sri Dr. Zaleha Kamaruddin

Rektor, Universiti Islam Antarabangsa Malaysia (UIAM)



Proses globalisasi sangat ketara mempengaruhi sistem pendidikan sejagat masa kini dari pelbagai sudut – bahasa pengantar sekolah-sekolah dengan Bahasa Inggeris sebagai bahasa antarabangsa, penggunaan teknologi maklumat dalam pendidikan, kepentingan kemahiran insaniah, dan ranking sejagat antara institusi-institusi pendidikan tinggi di dalam mahupun di luar negara. Sudah tentu setiap negara perlu berhadapan dengan arus perubahan ini untuk terus relevan. Justeru perlulah digembeleng segala tenaga dan buah fikiran bagi menghasilkan satu pelan pendidikan yang mampu mengatasi pengaruh negatif globalisasi dan seterusnya memacu kearah transformasi pendidikan negara secara menyeluruh dengan cekap dan berkesan. Dalam konteks negara kita, Pelan Pembangunan Pendidikan Malaysia (PPPM) (2013-25) telah pun dirangka dan harus dilaksanakan dalam tiga gelombang. Gelombang pertama telah pun bermula dan terdapat beberapa isu yang harus ditangani bagi kelicinan pelaksanaan. Maka atas kesedaran inilah tema “Memacu Pelan Transformasi Pendidikan” dipilih.

Seminar Kebangsaan Majlis Dekan Pendidikan Malaysia (MDPM) yang Ke-4 merupakan satu platform atau medan bagi para sarjana, cendekiawan, pendidik dan pembuat dasar pendidikan seluruh negara membedah dan memeriksa PPPM (2013-25) supaya dapat memperkemas dan memastikan pelaksanaannya yang lebih berkesan. Moga-moga seminar ini akan dapat menghasilkan beberapa resolusi berbentuk strategi penyelesaian terhadap isu-isu yang menghalang kelicinan dan keberkesanan pelaksanaan PPPM di samping membantu mendalami pemahaman para hadirin tentang isu pendidikan negara.

Saya mengalu-alukan kehadiran semua peserta yang berhimpun dalam seminar yang ke-4 ini. Semoga Seminar Kebangsaan MDPM 2013 ini dapat memperkaya dan menggugah akal dan rohani semua yang hadir.

Akhir kalam, saya ingin mengucapkan jutaan terima kasih kepada semua Pengucaputama, ahli MDPM, pembentang kertas kerja, peserta dari pelbagai jabatan, agensi dan institusi dan khususnya kepada Pengerusi dan Ahli Jawatankuasa Seminar Kebangsaan MDPM yang begitu komited untuk memastikan kejayaan seminar ini. Semoga semua usaha ini akan diterima oleh Allah S.W.T. sebagai amal jariah kita.

Sekian. Terima kasih.

Prof Rosnani Hashim
Dekan,
Institusi Pendidikan, UIAM



Ingin saya mengucapkan ribuan terima kasih kerana diberikan kesempatan untuk memberi kata-kata aluan untuk buku program Seminar Kebangsaan Majlis Dekan Pendidikan IPTA 2013.

Pada kali ini, Majlis Dekan Pendidikan IPTA dengan kerjasama Institut Pendidikan UIAM (INSTED) telah berusaha untuk menganjurkan Seminar Kebangsaan Majlis Dekan Pendidikan IPTA 2013 (MEDC 2013) dengan temanya “Memacu Pelan Transformasi Pendidikan Negara”. Saya berpendapat tema ini sangat berseesuaian dengan agenda transformasi pendidikan negara di mana adalah menjadi matlamat akhir kita bahawa sistem pendidikan negara akan menjelma standing dengan negara-negara maju tetapi berasaskan acuan kita tersendiri. Sebagai pengerusi Majlis Dekan Pendidikan IPTA semasa, saya sangat-sangatlah berharap semua kertas kerja yang dibentangkan akan menghasilkan dapatan-dapatan dan idea-idea baru yang mampu membantu secara efisien melonjak transformasi pendidikan negara ke arah yang di tetapkan sebagaimana dalam Pelan Pembangunan Pendidikan Malaysia 2013-2025.

Seterusnya, ingin saya mengucapkan ribuan terima kasih kepada INSTED, UIAM amnya dan ahli Jawatankuasa penganjur seminar kebangsaan ini yang telah bertungkus-lumus untuk menjayakan seminar ini. Akhir sekali, saya juga mengalu-alukan kedatangan semua pembentang dan peserta seminar kerana tanpa tuan-tuan dan puan-puan sekalian seminar ini tidak akan menjadi kenyataan.

Terima kasih.

Prof. Dato' Dr. Abdul Rashid Mohamed
Pengerusi Majlis Dekan Pendidikan IPTA
Pusat Pengajian Ilmu Pendidikan
Universiti Sains Malaysia.



Sukacitanya ingin saya mengucapkan ribuan terima kasih kepada Dekan Institut Pendidikan (INSTED), IIUM kerana telah menaruh kepercayaan serta keyakinan kepada saya sebagai pengerusi Seminar Kebangsaan Majlis Dekan Pendidikan IPTA 2013 Kali ke IV (MEDC 2013). Di samping itu juga , ingin saya mengucapkan ribuan terima kasih kerana diberi kesempatan untuk menukikan sepatah dua kata dalam buku program seminar ini.

Sebagaimana maklum, objektif Majlis Dekan Pendidikan IPTA (dengan kerjasama INSTED) mengadakan seminar kebangsaan ini antara lainnya adalah untuk menyediakan satu platform dalam usaha menjana idea-idea yang berkesan bagi memperkemas dan memastikan pelaksanaan secara berkesan pelan transformasi pendidikan negara.

Untuk memperincikan lagi objektif di atas, maka tema seminar pada tahun 2013 ini adalah “Memacu Pelan Transformasi Pendidikan”. Tema ini mampu memandu para sarjana dan penyelidik memfokuskan pembentangan mereka berdasarkan lima sub-tema seperti berikut:

- Kesamarataan akses kepada pendidikan berkualiti bertaraf antarabangsa,
- Profisiensi dalam Bahasa Malaysia dan Bahasa Inggeris bagi setiap murid,
- Melahirkan rakyat Malaysia dengan penghayatan nilai-nilai Islam dan universal,
- Transformasi keguruan sebagai profesion pilihan dan
- Merealisasikan penempatan kepimpinan berprestasi tinggi di setiap sekolah.

Sebagai pengerusi seminar kebangsaan tahun ini, adalah menjadi harapan Majlis Dekan Pendidikan IPTA supaya seminar ini dapat membuahkan hasil demi faedah ummah dalam jangka masa yang panjang. Sukacita juga saya mengucapkan selamat berseminar di Universiti Islam Antarabangsa Malaysia (UIAM) “Garden of Knowledge and Virtue”. Sebelum mengundur diri, izinkan saya menyusun sepuluh jari memohon ribuan maaf bagi pihak diri saya serta rakan-rakan lain dalam jawatankuasa seminar jika terdapatnya sebarang kekurangan dalam pengurusan perjalanan seminar ini. Yang buruk dan lemah itu adalah datangnya daripada kami dan yang terbaik itu adalah datangnya daripada Yang Maha Pencipta, Allah Subhanahuwataala.

Terima kasih.

Prof. Madya Dr. Hairuddin Mohd Ali

Pengerusi

Seminar Majlis Dekan Pendidikan IPTA 2013 (MEDC2013)

Using CFA for the Alternative Quality Assurance Evaluation Model (QAEM) For
National Universities Commission (NUC) of the Federal Republic of Nigeria

Bojuwon Yusuf Bolaji and Hairuddin Bin Mohds Ali
Institute of Education, International Islamic University Malaysia.
E-mail: bojuwon 2003@yahoo.com; hairuddin@iiu.edu.my

“If you can’t measure it, you can’t manage it” Deming, (2010) and Drucker (2010), (2006), (2009), Kaplan, (2009) and Patterson (2008) who said, “If you can’t measure it, you can’t manage it. The above quotations are views from different authors who are related to the research that is conducted on Nigerian University System (NUS) of education. The structures and content of today’s educational system in Nigeria are derived largely from the well acclaimed 1969 outcome of the curriculum conference which provided the conceptual and doctrinal framework by which to build a true great Nigeria. It thus metamorphosed or gave birth to the publication of the National Policy on Education (NPE) of the Federal Republic of Nigeria and was launched in 1977; and revised in 1981, 1998 and most recently, in 2004. The paper is to examine the construct validity of the of the alternative QAEM NUC construct. The paper examined the dimensionality of the model using CFA to checked the fitness of the data for the alternative QAEM accreditation scale constructs for NUCS. The paper employs a quantitative approach to survey the alternative QAEM (SCON) parameters through the process of validation that involve Confirmatory Factor Analysis. The finding demonstrated that the Alternative QAEM accreditation scale construct for NUC revealed that the threshold value recommended supported the sample of the data collected.

Keywords: Alternative, NUC, QAEM, SCON, CFA

Introduction

The importance and the power of education is implied in the education motto “no child is left behind and all children matter” (NPE, 1977). It is a highly philosophical assumption whereby every Nigerian citizen should have equal opportunity in education at all levels, irrespective of sex, age, and race, nationality, physical ability and political or social status. However, the Nigerian Education System is generally conceptualized not simply as the standard for cultural transmission but the main vehicle for accelerating individual, community and national development. Education in general and higher educational institutions in particular, are fundamental for the construction of a knowledge economy and society in all nations (WORLD BANK, 1999). Nigeria has put great efforts to promote the development of higher-education institutions, including the promulgation of policies such as Mass Education for the country; the seven-point agenda for which the education sector received the second highest budget allocation; Girl Child Education, Vision 2015; introduction of Educational Trust Fund (ETF) for all federal and state universities; establishment of nine additional federal

universities in order to boost access and expansion of enrolment. The approval for new private universities has also developed rapidly in the last decades affecting the number of both state and private universities. Hence, the establishment of these universities has increasingly diversified higher educational institutions in Nigeria. These are all due to the efforts taken by the Government of Nigeria in order to enhance the quality, efficiency and effectiveness of higher educational institutions in the country (Pai Obanya, 1999)

Nevertheless, the latent of university education systems in Nigeria to fulfill this task is frequently thwarted by long-standing challenges bedeviling the system such as inadequate funding, lack of efficiency, low lack of academic standard, equity, quality and governance, poor teaching and learning facilities, curriculum problems, shortage in human resource and poor technology input. Now, these old challenges have been affected by new challenges linked to the growing role of knowledge in economic development, rapid changes in telecommunications technology, and the globalization of trade and labour markets (Salam, 2001; Ajayi& Ayodele, 2002; Ajayi & Ekundayo 2006 and 2008). According to the reports by Nigerian University Commission (NUC) on universities' accreditation results, stakeholders in education are disturbed over the future of universities in Nigeria (NUC, 2005). They are quite uncomfortable and thus, express great concern for the poor standard of university education, of special reference of particular concern from stakeholders in educational sectors, educational researchers, administrators, political leaders and others. Such challenging standards are the problem of access, which has attracted a lot of attention, particularly in recent years. This situation has further caused greater concern to most of Nigeria's people.

The main aim of this paper is to check the dimensionality through the CFA for the propose alternative quality assurance evaluation model (QAEM) accreditation scale for Nigeria University Educational System (NUES) through the accreditation board of NUC, the regulatory agency of higher educational institutions in Nigeria. Such evaluation should be taken in a wider context of quality perspective of all stakeholders, since higher education has to witness extensive growth and the university education has become a rigorous competition for students.

The objectives of accreditation of academic programmes in the Nigerian university system are:

1. Ensure that at least the provisions of MAS documents are attained, maintained and enhanced;

2. Assure employers and other members of the community that Nigerian graduates of all academic programmes have attained an acceptable level of competency in their areas of specialization;
3. Certify to the international community that the programmes offered in Nigerian universities are of high standards, and their graduates are adequate for employment and for further studies.
4. Provide universities with avenues for self-evaluation, especially where the accrediting panel's report coincides with the institution's appraisal of what it is doing.
5. Serve as an avenue for advising proprietors of institution to revitalize them when they fail to meet their stated objectives.
6. Give both the staff and students' pride in associating with a programme that has achieved full accreditation status (NUC, 1989a).

Other purposes include encouraging university and programme involvement; assuring stakeholders of university education programmes offered in them are clearly defined and appropriate to standards and help institutions to develop their programmes. Hence, it will also enable the universities to set goals for the improvement of their academic programmes, which results in an improvement of quality assurance standards. The process of accreditation begins with the establishment of following process;

- i. A set of minimum standards against which programmes are evaluated.
- ii. A panel of experts evaluates the performance of the programmes against the standards.
- iii. A decision is taken based upon the accreditation status, whether to permit continued operation of the programmes, make minor adjustments to it or the programmes to be suspended.

Stakeholders' Contributions

The concept of stakeholder pressure and contributions in strategy development and management reform had become popular during the 1980s, with emphasis on strategy management theory. Freeman (1984) points out that, stakeholders as developed in the context of policy management theory, incorporates any groups or individuals who can affect or are affected by the achievement of the organization's objectives. Consequently, from HEIs' viewpoint, Amaral and Magalhaes (2002 cited in Matlay 2009) define stakeholders as a person or entity with legitimate interest in HEIs and who, as such, acquires the right to intervene.

From the above the concept of stakeholders covers financial investment as well as non-financial interests, which thus require indirect, a least, commitment and involvement (Matlay, 2006). Nonetheless, the stakeholders maintain that legitimate interest in education is considered longer than that of both for profit and social enterprise (Matlay, 2006a). However, the situation is so complex on the issues of legitimacy and rights of various stakeholders to intervene or influence the component aspects of HEI activities (Matlay, 2006b). On the other hand, the ongoing decline in

both direct and indirect funding for HEIs has forced some of them to act entrepreneurially and seek external sources of income (Pratt & Poole, 2000; Matlay, 2005a) for example, by providing various business and consultancy services to local and regional customers. Therefore, there is a need for the surplus of money to be reinvested for HEI purposes (Archer et al., 2003) and for the benefit of the community and society at large .

In a longitudinal study of entrepreneurship education in the UK Matlay, (2009) and Vollmers et al., (2001) declare that stakeholders in the USA including students, educators, alumni and members of the business community, have an essential role in the growth of entrepreneurship education curriculum that is applicable for local and regional developments. Thus, by obtaining feedbacks from each stakeholder group, a university can determine how best to meet their needs. It is therefore, necessary for HEIs to understand what graduating students will anticipated when they enter the labour force, and what skills and abilities will be of value and serve them well in their career (Vollmers et al., 2001).

Similarly, for Reavil (1988) stakeholders belong to two groups, they are internal, which comprises students, teaching and research staff, administrators and managers and the external which includes, parents, alumni and entrepreneurs, as well as various representative professional bodies, government and communities. In another dimension, Reavil (2008) proposes two models based on product and analogies. These, however, resulted into inadequate because each has a different set of educational customers (students). Hence the model was based on the postulation that HEIs act like long-established supplier and therefore, request to categorize the needs and conditions of their great customers. Thus, the students, institutional employers and future employers emerged as outstanding stakeholders in this model (Koksal and Egitman, 1998).

According to Cheng (2003), response to the worries of accountability in both public and the stakeholders' expectations in the 1990s caused the second paradigm waves of proposed education reforms in institutions to lay emphasis on effectiveness in terms of education quality, stakeholders' satisfaction, and market competitiveness. In support, most policies aimed at ensuring quality and accountability to the internal and external stakeholders (Headington, 2001; Mahony & Hextall, 2000; Heller, 2001).

In contrast, Michael and Sower (1997) report that quality assurance of education does not signify essentially to give in to students no matter what they want. In fact, their points of view come from the fact that students are mostly engaged with short-term satisfaction, and students are just concerned about passing the exams and graduating, which are in contrast of real learning and long-term purposes of education. Moreover, Venkatraman (2007) found that customers in HEIs must be regarded as stakeholders, which in this case, we take into concern both internal stakeholders like workforce and external stakeholders such as students and societies.

1. Providing opportunities for students to manage their own doings within the limitations of available resources
2. Suggests useful experiences for individual growth and self-discovery
3. Opportunities to organize events

4. Participate in student leadership management

Hill et al. (2003) stress the magnitude of both teaching staff and non-teaching staff and report that the quality of the professors belongs to the most important factors in the provision of high-quality education. Finally, Pozo-Munoz et al., (2000) and Marzo-Navarro et al. (2005b) suggest that teaching staff are main actors in a university, exercising major positive control on student fulfillment.

Teacher quality is a complex phenomenon, and there is little consensus on the subject of how it should be defined and measured (Hammond, 2000; Goldhaber, 2002; McCaffrey et al., 2003; Seidel & Shavelson, (2007). Definitions range from the kinds of preparation and knowledge teachers possess, what to be taught to students, how knowledge should be imparted, to classroom effectiveness. Hence, teacher quality including qualifications teaching methods, and teaching and research experiences are poor.

Furthermore, most existing research on teacher quality pertains to clear attributes, training, and credentials (McCaffrey et al., 2003). There is mixed evidence, however, that experience and education levels are associated with student learning (Goldhaber, 2002; Wenglinsky, 2002 cited in Sok, 2007). However, some studies examining teachers' professional qualifications indicate a slight but positive relationship between the quality of their preparation and credentials and their students' achievement (Hammond, 2000, 2004). Research on teacher effects indicates differences among teachers in producing student outcomes (Cohen & Hill, 2000; Nye et al., 2004).

In the study of quality assurance measurement, Owlia and Aspinall's (1996) hypothetical framework demonstrate quality dimensions with an emphasis on teaching aspects of education (academic resources, competence, and attitude, content). Meanwhile, Waugh (2001) reports on the model of administrative and supportive service quality (reliability and responsiveness, assurance and empathy). Although administrators (stakeholders) do not contribute to the teaching process, the quality of teaching and administration processes should be evaluated by both academic and administration personnel as members of the organization.

Additionally, literature on the stakeholders' theory can be divided into three categories: descriptive, instrumental and normative. The descriptive view asserts that managers behave as if stakeholders mattered because of the fundamental justice of their claims on the firms (Brenner & Cochran, 1991; Delmas & Toffel, 2004; Jones, 1994). The instrumental view states that performance of firms eventually depends on the ability of organization to manage the interests and expectations of various stakeholders excellently and resourcefully. Thus applying this in universities will bring many quality assurance changes in educational sectors (Muralidhar et al., 2001).

Consequently, Asyraf Wajdi Dusuki (2006) views the operations and management of organizations in stakeholders' context based on moral behaviour of the stakeholders, and the philosophical guideline management used in managing the organization, taking into cognizance the existence of diverse stakeholders' characters. Similarly, the university needs to consider these stakeholders in making decisions about work routine and workplace condition, the right to safety, pleasant education, and

provision of quality facilities that are functioning, motivating training and sponsoring of staff, provision of funds and decent accommodation for both staff and student.

Zhuoke and John (2009) demonstrate the fundamental issue that various stakeholders assume to be essential in considering the quality of private HEIs in the context of mass education in China. Their research looked at the differing perceptions of quality held by students, teachers, parents, university managers, employers and government officers in order to know the capabilities and evidence upon which their judgments and opinions formed. The research further worries about how such judgments and opinions impact upon the future development of private HEIs.

Contrary to this, Samuelson et al. (1985), Breakwell and Tytherleigh (2010) in their interpretation of confirmation that most university quality performance is explained by situational factors establish that loyalty to ethnic demands by the management and benefaction (political or religious), socio-demographic characteristics of leaders, moral integrity and confidence the followers have on the leader lack of sufficient physical facilities of the individual universities are the foremost challenges of enhancing quality assurance requirements by university management which have trivial influences on the performance of the management leadership of universities. Samuelson et al. (1985) who views on funding, maintenance of university facilities and budgeted funds were hardly collected in public universities. They were controlled by government ministry compared unlike in the private universities which have better physical facilities and have successfully involved their stakeholders in the management of the institutions (Samuelson et al., 1985; Gudo, Oanda, Olol, 2011).

Other significant literatures are concerned with stakeholders' perceptions of quality (Hill et al, 2003; Watty, 2006; Lomas, 2002; Lagrosen et al, 2004; Shanaha & Gerbers 2004). Consequently, the drive by universities to enhance and evaluate programme quality is partially fueled by an ever-increasing public demand for institutional accountability (Duderstadt & Womack, 2003; Suskie, 2006).

However, there is also a movement toward greater inclusion of stakeholders' contributions in evaluation (Miller, 2007). For instance, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) required accredited counselor education, programmes to include stakeholders (e.g., faculty, current students, alumni, employers) in programmes evaluation (CACREP, 2001). This is aimed at increasing quality assurance of universities and placing greater importance on students learning outcomes (Cashwell, 2008; Urofsky, 2008). These practices demonstrate the board's dedication to quality assurance in the field of counselor education, to counsel students' growth and development and also manage their problems.

Campbell and Rozsnyan (2002) view accountability as the assurance of a component to stakeholders provides education of good quality. This is linked extensively to all organizational services in which the university is one of them. Consequently, the rise in the stakeholders' pressure on accountability in university is as the result of cost and potential problems of massification, the need to ensure value for money they pay and the donation to the universities, lack of clear lines of accountability within the university and the need to keep control of an unrestricted

market. Subsequently, the university is generally seen as accountable to the variability of stakeholders, and held for account ability on the expenditures of money given. To justify these, administrators of universities need to pledge the stakeholders the institutions; they administered and offer quality teaching, research and community service.

NCAHE (2004) operational by a few that relate accountability directly to performance evaluation. This comprises information about performance, and the impending sanctions and rewards leading to the question of content, power connection and authority in HEIs' accountability. GUNI (2003) reported that accountability is bound to governance, meaning that information about university sets goals that have been achieved and how they have been achieved should be transparent. The university administrators should work to establish a mechanism to make them accountable to the educational sector.

However, accountability of a school educational institution to the public or key stakeholders is often perceived as important indicators for satisfying the needs of stakeholders. Thus, the tools used to ensure interface quality in education are institutional monitoring, institutional self-evaluation, quality inspection, use of quality indicators and benchmarks, survey of the key stakeholder satisfaction, accountability reporting to the community, parental and community involvement in school governance, institutional development planning, school charter and performance- based funding (Jackson & Lund, 2000; Smith et al., 1999; Glickman, 2001; Leithwood et al., 2001; Sunstein and Lovell, 2000; Cheng 1997a as cited in Cheng 2003).

Consequently, with the involvement of stakeholders' contributions in quality assurance evaluation of Nigerian universities this research welcomes the ideal concerning the use of the above theory and literatures which have worked competently in accrediting their programmes. Hence, the stakeholders as those that have an influence directly or indirectly on components of higher education programmes such as students, academic staff, administration, parents, graduates, employers, Higher Education Council, Ministry of Education and other related institutions. In the area of employment opportunities, tribalism (ethnicity) and nepotism hinder equal employment opportunities in universities. It was found that management culture in public university was unadaptive, rigid, and bureaucratic and did not inspire equal employment opportunities (Ndegwa, 2007 as cited in Gudo, Oanda, & Olel, 2011). Thus these serve as an obstacle to objective search for more qualified personnel for quality assurance management of the institution.

Gudo, Oanda, & Olel, (2011) point out that lack of teamwork in private universities negatively affect the quality of education offered. This is because effective universities will recognize that staffs frequently hold the key to innovation among other members of staff, which only need the right enabling passage to share their skills and ideas. The non-involvement of staff in decision-making would harmfully affect the quality of services offered by the lecturers in both private and public universities while the involvement of staff in decision-making would have the positive impact on management decisions and create favorable enabling environment for effective teaching and learning to take place.

To support these views, Olayo, (2005) maintains that low level of participation of staff in decision-making in educational institution reduces employee work performance in Kenya with regard to efficiency and effectiveness. Correspondingly, students' participation in decision making is meaningfully different between private and public universities. Their participation in decision-making was better in private universities than public universities. For instance, the students' riot was attributed to the misunderstanding between management and students, poor management, inadequate learning facilities, funding, current books, guidance and counseling services and others (K' Okul, 2010).

The stakeholders' contributions will be an important focus of intervention in the alternative accreditation criteria and process to ensure consensus, rights and sustainability of quality assurance of the universities in Nigerian. Therefore, the interventions will be designed to increase the awareness and skills of university's management teams by providing in quality assurance evaluation methods in university, as well as maintain support systems to monitor performance according to MAS and aiming to improve feedback mechanisms in order to inform stakeholders about achievements and quality gaps in the performance of universities.

Confirmatory Factor Analysis (CFA): Testing the Unidimensionality of Alternative QAEM (SCON) Accreditation Scale

To assess whether a model fit the data for the alternative QAEM (SCON) accreditation scales the unidimensionality of the SCON with the application of several fit indices were examined. The Chi-square likelihood ratio test statistics, which evaluates the overall model fit by testing whether the model imitates the array of covariations between the observed variables, is described. A low and non-significant Chi-square value specifies a good fit of the model to the data. The applications of CFA on the alternative QAEM (SCON) scale were expected to yield SCON having four factors (TS, NT, ST and MC).

Principal Component Analysis (PCA) of the alternative QAEM Scale: Underlying factors of the SCON

The second PCA analysis with varimax rotation was performed on the SCON to examine the fundamental composition of 29 scales with varimax rotation performed on SCON, which comprised four-dimensional constructs initially anticipated on hypotheses by the researcher. The survey scales were from the alternative QAEM constructs of SCON (TS, NT, ST and MC). To obtain the factor solution for SCON, Varimax rotation was conducted. The result of the analysis shows that there were four unobserved component measured by the data. The result shows that the application PCA on the latent root criterion, only manage to yield four- factor solution. These four underlying factor of SCON dimensions accounted for 56.048% of the total variance explained among the 30 scales. Based on the eigen value of more than 1 the largest eigenvalue of the component were 8.266 and the lowest were 1.060. The outcomes of PCA are detailed in Table 1 below.

Table 1
Principal Component Analysis Results and Total Variance Explained for the Alternative QAEM Construct SCON

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.266	35.941	35.941	8.266	35.941	35.941	4.183	18.185	18.185
2	2.180	9.479	45.420	2.180	9.479	45.420	4.127	17.944	36.129
3	1.385	6.020	51.440	1.385	6.020	51.440	3.373	14.664	50.794
4	1.060	4.608	56.048	1.060	4.608	56.048	1.209	5.255	56.048

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Rotation Converged in 4 iterations.

Factor Analysis (FA) of the Alternative QAEM Scale: *Underlying factors of the SCON*

The employment of FA on the SCON is to examine more fact about the underlying structure of the QAEM particularly the SCON. The rotated matrix used extracted five-

factor solution which shows evidence of practically and statistically significant of SCON underlying factors by PCA.

The rotated factor matrix results for the QAEM SCON scales in Table 2 showed that factor loadings were in positive direction and greater than .50 which demonstrated practically and statistically significant.

Meanwhile, Table 2 below demonstrates the results of the SCON loading from the use of PCA with orthogonal varimax rotation for all 30 scales. Of the 30 scales, 22 scales perfectly loaded into four dimensional factors. There were some scales that were blank and some factorial complexity due to the fact that they were below the .50 cut-off point or threshold value recommended.

Table: 2

Rotated Component Matrix^a for the Alternative QAEM Scale: Stakeholders' Contributions Constructs SCON

Scales	Components			
	1	2	3	4
TS1(Q66)	.782			
TS2(Q67)	.756			
TS3(Q68)	.893			
TS4(Q65)	.897			
TS5(Q71)	.903			
TS6(Q72)	.866			
NT1(Q73)		.888		
NT2(Q74)		.957		
NT3(Q75)		.688		
NT4(Q77)		.943		
ST1(Q79)			.829	
ST2(Q84)			.783	
ST3(Q81)			.734	
ST4(Q82)			.920	
ST5(Q93)			.689	
ST1(Q79)			.900	
MC1(Q88)				.911
MC2(Q87)				.795
MC3(86)				.877
MC4(Q90)				.767
MC5(Q91)				.850
MC6(Q85)				.689
MC7(Q83)				.900

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations

Similarly, in Table 3 after the employment of FA, it shows that there were four underlying factors met the guidelines set and were retained. As the factor solutions were not free from factorial complexity and consistent with the proposed underlying dimensions. The analysis applied the techniques of successive scales deletion. Those scale representing SCON dimension that were not loaded on any four factor solution, the exclusion of those scale was performed and subsequently some scales were discarded for use. Therefore, some scales were dropped because of factorial complexity.

Table 3
Alternative QAEM: Item Reduction of Stakeholders Contributions Constructs (SCON)

Components	ComponentsFactors	No. Scales	Numbers of Indicators Retained	Re-Named	Numbers of Discarded Indicators
Stakeholders' Contributions (SCON)	1. Teaching Staff	AS (Q66), AS2 (Q67), AS3 (Q68), AS4 (Q65), AS5 (Q71), AS6 (Q72). (6)	6	IN	TS 99,100
	2. Non-Teaching Staff	NT1 (Q73), NT2 (Q74), NT3 (Q75), NT4 (Q77), NT5 (Q76). (5)	5	NT	-
	3. Students	ST1 (Q79), ST2 (Q84), ST3 (Q81), ST4 (Q82), ST5 (Q93). (5).	5	ST	ST 14
	4. Management Commitments	MC1 (Q88), MC2 (Q87), MC3 (Q86), MC4 (Q90), MC5 (Q91), MC6 (Q85) (6)	6	MC	MC 123
					-

The 22 scales for SCON loaded in four distinct components are presented in Table 5.19. Results of the EFA were used to ascertain the scales with approximately corresponding loadings on the factor labeled. The four factors which represented SCON were labeled as TS, NT, ST and MC respectively.

This part of the paper presents the results of construct validity of the four latent constructs of alternative QAEM accreditation scale construct for NUC. The confirmatory factor analysis (CFA) method was performed to examine and test the hypotheses set for this paper. The component are calculated using all of the variance of the manifest variables, and all of that variance extracted performs in the solution were within the threshold value recommended. The result of PCA on the sample for this paper revealed that alternative QAEM (SCON) accreditation scale is represented by four dimensional factors in universities educational institution in Nigeria. Consequently, using CFA in this paper, the construct validity of SCON demonstrated further confirmation for seven component of alternative QAEM (SCON) accreditation scale construct in the context of established universities institution surveyed and the construct is explained by four dimensional factors; TS, NT, ST and MC. However, the result from rigorous analysis; particularly average variance extracted and composite reliability index which established the evaluation of the alternative QAEM construct validity, convergent validity and the composite reliability of the scales, that formed the seven construct which further proffer the evidence of validity and reliability. The reliability of the alternative QAEM (SCON) accreditation scale construct are shown below in Table 00

Table : 4

Reliability of the alternative QAEM (SCON) accreditation scale constructs

S/N	Alternative QAEM SCON and LCL)	Scale(IP,	Cronbach's Alpha α	Total Alternative Scale	Cronbach's Alpha α
1	Teaching Staff	TS	0.900	SCON (23)	.911
2	Non-Teaching Staff	NT	0.950		
3	Students	ST	0.870		
4	Management Commitments	MC	0.920		
<hr/>					
Total		4			

To determine the construct validity of the alternative QAEM (SCON) scale were obtained through involvement of a multiple techniques of analysis in recognizing the internal arrangement of the measure and this could be evaluated and comprehended under the assumption that, if scale measure a particular construct, responses to those scale will be highly similar or converged to that particular construct.

Furthermore, the convergent and discriminant validity were determined through CFA. From the results it shows that when comparing the averages variance extracted of each

construct with the share variance between constructs it demonstrated that the AVE for each construct is greater than the SV with other construct, which indicated that there is existence of discriminant validity, which means that discriminant validity is supported. The paper further attested that DV is assessed by comparing the SV (square correlation) between each pair constructs against the average of the AVE for these constructs. Conclusively the variance extracted estimates is greater than the square correlation estimates (Hair et al., 2010). Table 2 exhibited details of the results

Model Specification and Goodness- of –Fit

The underlying SCON construct evaluated using the measurement model was the SCON construct. The construct contained four fundamental factors extracted which are TS, NT, ST and MC. The results of the hypothesized measurement model, as displayed in Figure 1 compose of four factors. For this research, the results of CFA of the alternative QAEM (SCON) accreditation scale reveal that the two sets of indices that were essential to report on are the fit indices and the parameter estimates. Figures 1 below demonstrate the following output. The test for objectivity of covariance and means of fit indices used shows that Chi-square yielded significantly to the data.

The first factor which is acknowledged as TS is assessed by 7 scale/indicators variables. The second factor is recognized as NT, and it is evaluated by 6 indicator variables. The third factor, which is referred to as ST which is assessed by 5 scale variables. The final factor which is recognized as MC is also evaluated by 5 scale variables. Figure 1 show the generated results for the hypothesized measurement model for SCON. Generally, 23 scales were hypothesized to load on sub-scales of the SCON unobserved construct as earlier extracted through the application of PCA. The interrelationships among the 23 scales of alternative QAEM unobserved accreditation scale construct were checked at the estimates section of the AMOS (version 18.0) text output, and it designated that the indices were statistically significant.

A CFA was employed through the application of AMOS 18 using maximum likelihood estimation (MLE) in generating the estimates of the full-fledged SEM (Byrne, 2010). The outcome shows that the measurement model of the observed variables specified that overall goodness-of- fit of the model was DF (200), χ^2 (1583.151, $p = .000$) which was statistically substantial. This represented an insufficient goodness-of-fit (GOF) among the covariance matrix of the observed data, and this implied that covariance matrix and estimated procedure of the model satisfied the essential statistical distribution (Arbuckle & Wothke, 1999; Marsh, Hau & Wen, 2004) of the alternative QAEM (SCON) accreditation scale constructs. The indices were χ^2 (2) = 1583.151, $P = .0001$ CMIN/DF = 7.916. It is admitted that Chi-square has limitations in judging the model fit due to its sensitivity to larger sample size, and thus it is suggested to use other measures of model fit for more realistic technique of model fit assessment. Therefore, the outcomes acknowledged the estimates of not suitable properties of alternative QAEM constructs of NUC there is the need for the re-specified the model for good fit

Supplementary indices of the model GOF were also used following the guidelines by scholars (Byrne, 2010; Hair et al., 2010) whereby at least one absolute fit

index and one incremental fit index must be used in addition to the χ^2 statistics and the associated degree of freedom. The CFI was found to be .881, which was below the cutoff threshold value of 0.90 of indexes in Figure 5.2. Nevertheless, the normed chi-square was DF (200), χ^2 1583.151, which was above the acceptable $<- 3$ cut-off. :Chi-SquareDF (200), χ^2 1583.151, P = .000, CMIN/DF = 7.916, CFI .881, NFI .866, AGFI .860, GFI .889, TLI .862, IFI .881 and RMSEA .079. It thus falls below the acceptable range of .90. The value of RMSEA .079 was found to be in acceptable limit range of .05 and .08, representing a good data-model fit.

From the results it shows that all the fit indices used were found be inadequate value which provides evidence of model inadequacy (Chen et al., 2008 cited in by Hairudeen and Muhammad 2012). All together, the model did not fit the sample data of alternative QAEM (SCON) there is the need to re-modify the model since all the fit indices demonstrating the overall fit of the model was not encouraging as the χ^2 /df, TLI, AGFI, NFI, TLI, IFI, CFI, GFI and RMSEA were not found to be within their various satisfactory threshold value recommended which mean that the model had to be revise for fitness. Figure 1 describes this in detail

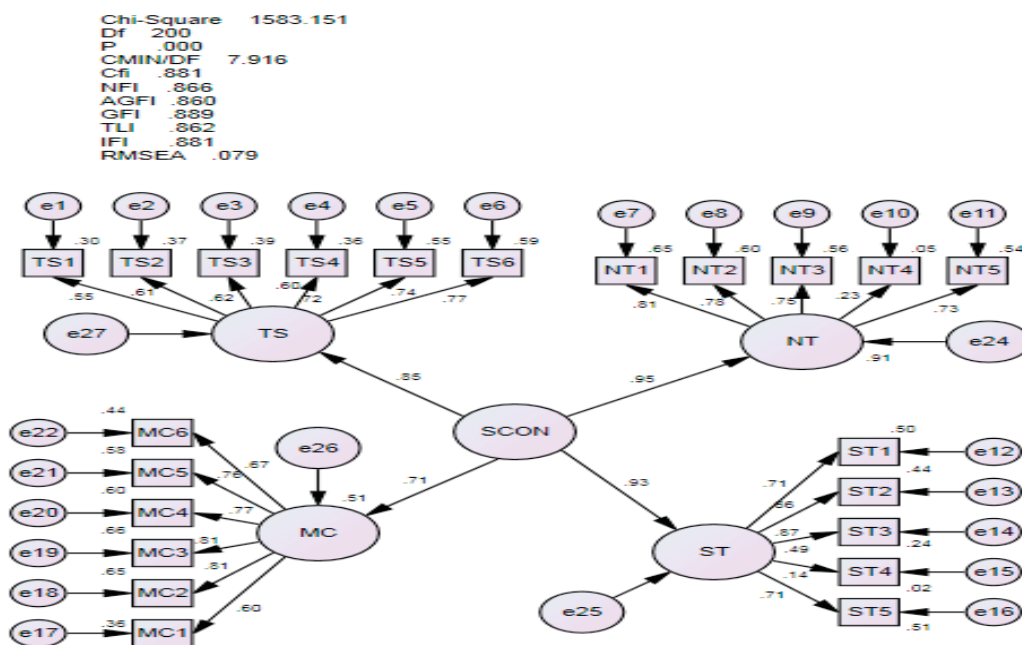


Figure 1.
The Results of the Hypothesized Four - Factor Model for the Alternative QAEM (SCON) Accreditation Scale

In addition, the loadings of the model ranged from .77 (TS6) highest while the lowest .52 (TS3), NT (.81) highest and the lowest NT4 (.23), ST3 (.87) highest while the lowest is ST4 (.14) and MC 2&3 (.81) highest while the lowest was MC1 (.61) all were statistically significant. Accordingly, the fit indices representing the overall fit of the model were a bit encouraging as the normed chi-square shown in Figure 5.2 gives detail of the

outcomes of the model fit and the parameter estimate of the alternative QAEM for SCON. The SMC exhibit the following results TS 6 (.59) highest and lowest was TS6 (.30), NT1 (.65) highest and the lowest NT4 (.05), ST5 (.51) highest while the lowest is ST4 (.02) and MC 3&6 (.66) highest while the lowest was MC1 (.31) this implies that NT4 and MC1 are below the threshold value recommended. The GOF; and post-hoc model modification indices were examined in order to ascertain a more parsimonious alternative QAEM construct. Thus, the hypothesized model of QAEM was re-estimated for better GOF. One of the criteria is to eliminate the offending estimate from the model because of factorial complexity. Also, the correlations between the errors were freed based on the application of the modification index thus improving the overall fit.

Re-Specification of the Hypothesized Model and Goodness-of-Fit

The results in Figure 5.2 that exhibit model-fit indices went beyond the general acceptance levels recommended as a guideline by earlier research, signifying that the model in this research exhibited a tolerable model-fit with the data collected. The initial model was re-specified in order to accomplish best GOF model during the re-specification for the initial existing QAEM constructs of NUC and the following results were obtained. The GOF indices showed that the overall fit for the re-specified model was stable with the data, the chi-square statistic was statistically significant (4) χ^2 626.412, $p=0.000$, denoting that was a the difference between the covariance matrix of the initial model data and the matrix of the re-specified mode DF (200-138), χ^2 (1583.151- 626.412)= DF (62) χ^2 956.739 difference. In order to improve model fit, modification indices were examined for expected parameter change values, and those with the maximum values were supposed to correlate. The values discovered that some of the error terms were correlated, and the model was modified to replicate these correlations. The modification index (MI) is the projected drop in overall chi-square value if the parameter were to be freely estimated (MI = 0) in a subsequent run. The aim of modification index was to reduce the RMSEA value in order to get better fit chi-square. Therefore, the following associations were made between the errors e1 and e2, e2 and e3, e3 and e4, e18 and e21 and e19 and e22. Accordingly, AMOS only advocates adding covariance between the error terms the relations were acceptable to co-vary in order to reduce the total amount to DF (200), χ^2 1583.151 and thus increase the GOF. This generated a model with the following indices: Chi-Square DF(138), χ^2 3626.412, $P = .000$, CMIN/DF = 4.539, CFI .954, NFI .942, AGFI .932, GFI .944, TLI .943, IFI .954 and RMSEA .057

Nevertheless, the re-specified GOF of the indicators' data, as the value of the normed chi square (CMIN/DF) was 4.539, which is within the cut off as endorsed by the statisticians (<3 for χ^2/df) to reflect a good fit for the model (Hair et al 2010). Equally, the re-specified model outcome fit the data based application of modification index which the Chi-square yielded non-significant to the data. The evidence is chi-square DF(138), χ^2 3626.412, $P = .000$, CMIN/DF = 4.539, CFI .954, NFI .942, AGFI .932, GFI .944, TLI .943, IFI .954 and RMSEA .057 which mean the re-specification model demonstrated the better fit. Details are exhibited in Figure 5.3. Given the guideline of the statisticians (Byrne, 2010; Hair et al., 2010) the difficulty of this model

(i.e. four manifest latent variables, 23 total scale and 1109 sample size ($n = 1109$), CFI threshold value of more than $\geq .90$ and RMSEA threshold value of less than $\leq .058$ demonstrated a good fitting model. The RMSEA .058 provide further confirmation of model acceptance (Chen et al., 2008). Remarkably, the findings of the **re-modification** model were considerable, the χ^2 was inconsequential, and the value of the Normed χ^2 (χ^2/df) also was ≤ 3.00 or ≤ 5.00 the cut-off suggested by statisticians is ≤ 3 or ≤ 5 for χ^2/df to reveal good fit for the model to the observed data. Likewise, other fit indices also exhibited sizable values for the re-modification model

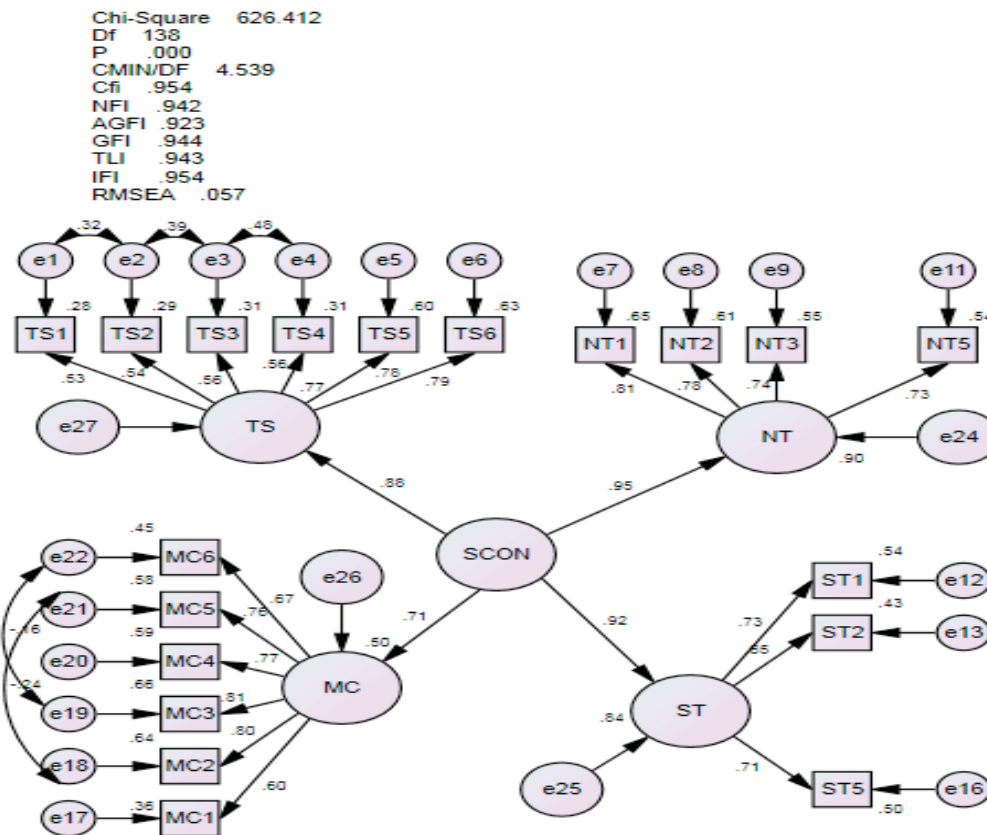


Figure 2

The Results of the Re-Specification of Conceptualized Four - Factor Model for Alternative QAEM Constructs (SCON)

The re-specification had resulted in an improvement of the model. The GOF indices in Table 5 below established a satisfactory significant, and all were within the threshold values advocated by Kline (2005 & 2010), Bollen (1989) and Hair et al. (2006 & 2010). Similarly, the parameter estimates were also surveyed and were established to be statistically significant and practically essential as depicted in Figure 5.2 above.

The factor loadings for the alternative QAEM constructs NUC ranged .78 (TS5) highest while the lowest .53 (TS1), NT1 (.81) highest and the lowest NT5 (.73), ST1 (.73) highest while the lowest is ST2 (.65) and MC3 (.81) highest while the lowest was

MC1 (.60) which were statically important and practically significant. All the values of the goodness-of-fit indices used to evaluate the model fit: the $\chi^2/\text{degrees of freedom}$ ratio (χ^2/df), the normed fit index (NFI), the Tucker-Lewis index (TLI); also known as the non-normed fit index, (NNFI), the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). As presented in Table were above the threshold values as stated. They were free from any offending estimate and displayed reasonable trend. Similarly, the SMC, which postulates how well the manifest variables function as procedures of the unobservable variables, and be responsible for substantiation of the reliability of the scales were also examined. The results show that TS 6 (.63) highest and lowest was TS1 (.28), NT1& 5 (.55) highest and the lowest NT2 (.51), ST1 (.54) highest while the lowest is ST2 (.43) and MC 3 (.66) highest while the lowest was MC1 (.38)

Table: 5

Goodness-of-Fit Measures of a Model, Recommended Guidelines and Indices Values
Model Specification Measurement for the Alternative QAEM Constructs (SCON)

Goodness-of-fit Measures	Recommended Threshold Values	Initial measurement model	Re-specified measurement model
X2		1583.151	626.412
DF		200	138
CMIN/DF	≤ 3 to 5	7.916	4.539
P Value	0.01	.000	.000
GFI	≥ 0.90 or above	.889	.944
AGFI	≥ 0.90 or above	.860	.932
NFI	≥ 0.90 or above	.866	.942
TLI	≥ 0.90 or above	.862	.943
CFI	≥ 0.90 or above	.881	.954
IFI	≥ 0.90 or above	.881	.954
RMSEA	≤ 0.50 to 0.80	.079	.057

Degree of freedom (df); Relative likelihood ratio (χ^2/df) Comparative fit index (CFI); Normed fit index (NFI); Root mean squared error of approximation (RMSEA)

DISCUSSION AND RECOMMENDATIONS

In summary, the CFA for the factor of alternative QAEM construct of SCON now represents four indicators for SCON. The hypothesized model sufficiently characterized the sample data. Moreover, the modification indices for all the parameters were below 10 (relatively small) leading us to determine once again that the GOF model fit the data remarkably well. It thus shows that using CFA for alternative QAEM (SCON) accreditation scale construct demonstrated that the model was consistent with the theory, statistically significant, practically significant loadings and the parameter estimates were within the threshold recommended with no any offending estimate. Therefore, the results supported unidimensionality of the construct of with the

finding that the constructs of alternative QAEM (SCON) accreditation constructs are valid and reliable.

This paper examined the dimensionality of the alternative QAEM accreditation scale constructs for NUC. The results of PCA demonstrated that SCON, in the universities educational institutions in Nigeria is described by four dimensions, specifically, SCON comprised of four factors respectively. The result shows that the above-mentioned factors are consistent with the threshold values recommended for the study. Using both CFA and evaluation of AVE and CRI, the evaluation of construct validity, convergent validity, discriminant validity, nomological validity, predictive validity and the composite validity of the accreditation scale that metaphors into the alternative QAEM accreditation scale construct for NUC, thus provided the proof/evidence of validity and reliability of the extracted alternative QAEM accreditation scale constructs of NUC.

The paper further suggest that there is correlation between this four factors, therefore this four factors of TS, NT, ST and MC will thus increase the quality of universities educational institutions if there is supports to these four dimensional components of alternative QAEM accreditation scale construct for NUC. These dimensional factors could help in determine how effective these factors could serve in enhancing teaching staff, non-teaching staff in discharging their duties, student performance in their respective field of study and also how committed the management teams in fulfilling their promises. Furthermore, it will judiciously help the universities institutions on the above alternative QAEM (SCON) accreditation scale which could hitherto lead to the better quality service provided and enrich high performance.

However, if attention is paid to the finding outcomes this would help NUC in develop and create high benchmark standards for all the programme to be accredited in respective universities in the country and thus lead to better quality enhancement. The finding would also played a key role in predicting the type of university administrators, initiative of programmes, their quality of work and also promises to the students and staff. In order to encourage alternative QAEM accreditation scale construct of NUC within universities educational institutions there is need to ensure that SCON components are addressed. Therefore, alternative QAEM accreditation scale construct approach needs to be adopted to ensure the effectiveness of the quality assurance services of accredited programs formulated by the NUC.

Furthermore, the benefit of this alternative QAEM measuring accreditation scale is that it provides performance data during the data collection process, thus minimizing the risk of subjectivity. The alternative QAEM accreditation scale measure will be used for the evaluation of programmes in universities educational institutions, and could be particularly beneficial in the continual quality services of the universities in Nigeria

The alternative QAEM accreditation scale construct developed can serve as a tool to enhance quality service performance. It will enable strategic decision on university satisfaction, provision of facilities, financial stability, efficiency and effectiveness of quality service process, sustainability and delivery of innovative programmes to universities affairs. Therefore, this dimensional factor of alternative

QAEM accreditation scale construct can be simply applied by universities educational institutions practitioners and teaching and non-teaching staff researchers to optimize quality service performance in their various universities

The findings from this study will contribute to the body of knowledge on the accreditation evaluation strategy and innovative of universities administrators and team management practice. In addition, the findings of this study will enables the NUC to benchmark in a whole sense by capitalize on the performance level of universities services provided to enhance quality. In addition, the recommendation suggested in this study will be used for ranking of the information usage in the universities educational institutions based on the multi-dimensional of the alternative QAEM accreditation scale system for NUC.

Finally, the findings identify alternative QAEM (SCON) accreditation scale construct of NUC act as the most essential determinant of improving quality service of universities educational institutions. Finally, this paper could serve as a guide to universities educational practitioners, Government, policy makers, with regards to factors that affect quality enhancement of the universities, and could serve also as a contextual material that supports literature on quality assurance evaluation model for accrediting programs in Nigerian universities and the application in the respective region.

REFERENCES

- Adam, J. E. E., Corbett, L. M. & Rho, B. H. (1998). Quality improvement in Korea, New Zealand and the USA, *Asian Pacific Journal of Quality Management*, 3, (2), pp. 13-25.
- African Union (2007). Developing an African higher education quality rating systems. Retrieved December 25, 2008 from <http://www.african-union.org>.
- Arbuckle, J. L. (2008). AMOS 17.0 user's guide. USA: AMOS development corporation
- Bagozzi, R. (1981). Evaluating structural equation models with unobservable variables and measurement error: a comment. *Journal of Marketing Research*, 18, (3), 375-381.
- Barrett, P. (2007). Structural Equation Modelling: Adjudging Model Fit. *Journal of Personality and Individual Differences*, 42 (5), 815-24.
- Schmidt, F. L., & Hunter, J. E. (1989). Interrater reliability coefficients cannot be computed whenonly one stimulus is rated. *Journal of Applied Psychology*, 74(2), 368–370.
- Bentler, P. M. (1990). Comparative Fit Indexes in Structural Models. *Psychological Bulletin*1007 (2), 238-46
- Bollen, K. A. (1989). Structural equation models with latent variables. New York: John Wiley & Sons.
- Bollen, K. A. (1990). Overall Fit in Covariance Structure Models: Two Types of Sample Size Effects. *Psychological Bulletin*, 107 (2), 256- 59.

- Bush, T. (2010). The significance of leadership theory. *Educational Management Administration and Leadership*, 38 (3), 266-270.
- Byrne, B. M. (2010). *Structural equation modelling with AMOS; basic concepts, applications and programmes* (2nd edited). New York: Taylor and Francis Group.
- Chen, F. Curran, P.J., Bollen, K.A., Kirby & J. Paxton, P. (2008). An empirical evaluation of the use of fixed cutoff points in RMSEA tests statistic in structural equation models. *Sociological Methods and Research*, 36, (4), 462-494.
- Cheung, G. W. & Rensvold, R. B. (2002). Evaluation goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modelling*, 9, (2), 233-255.
- Costello, A. B., & Osborne, (2005). Best Practice in Exploratory Factors Analysis: Four recommendations for getting the most from your analysis: *Journal of Practical Assessment, Research and Evaluation*, 10 (74), 1-9.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New Jersey: PEASON Merrill Prentice Hall.
- Creswell, J. W. (2009). *Research design: A qualitative, quantitative and mixed method approaches*. USA: SAGE publications, Inc.
- Deming, E. W. (1986). *Out of crisis*. Cambridge: MIT Centre for Advanced Engineering Study
- Denscombe, M. (1998). *The Good Research Guides for Small-Scale Social Research Project*. Buckingham: Open University Press.
- Ferguson, G.A. (1981). *Statistical analysis in PhD education* (5thed.) .New York: McGraw Hill
- Firdaus Abdullah (2005). HEDPERF versus SERVPERF: The quest for measuring instrument of service quality in higher education sector. *Quality assurance in education*, 13, (4), 305-328.
- Firdaus Abdullah (2006). Measuring service quality in higher education: HEDPERF versus SERFPERF. *Marketing Intelligence and Planning*, 24, (1), 31-47.
- Firdaus Abdullah, Alwi, M. R., Lee, N. & Ho, V. B. (2008). Measuring and managing franchisee satisfaction: a study of academic franchising. *Journal of Modelling in management*, 3, (2), 182-199.
- Fornell, C. & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18 (1), 39-50.
- Drucker, P. (1954). *Management: task, responsibilities and practices*. New York: Harpen & Row.257
- Fraenkel, J. R. & Wallen, N. E. (2008). *How to design and evaluate research in education*. New York: McGraw-Hill Inc.
- Franklin, S. B., Gibson, D. J., Robertson, P. A., Pohlmann, J. T. & Fralish, J. S. (1995). Parallel analysis: a method for determining significant principal components. *Journal of Vegetation Science*, 6, 99-106.

- Gillham, B. (2008). *Developing a questionnaire* (2nd ed.). London: Continuum International Publishing Groups.
- Ferguson, G.A. (1981). *Statistical analysis in PhD education* (5th ed.). New York: McGraw Hill.
- Goetsch, D. L. & Davis, S. B. (2006). *Quality management: Introduction to total quality management for production, processing and services*. New Jersey: Pearson Prentice Hall.
- Hair, F., Anderson, E., Tatham, L. & Black, C. (2010). *Multivariate data analysis* (7th ed.). New Jersey: Pearson Prentice Hall.
- Harris, A (2008). Distributed Leadership: According to Evidence. *Journal of Educational Administration*, 46, 221-231.
- Harvey, L. (2006). Quality culture, quality assurance and impact overview discussion. Paper presented at the conference of European University Association on embedding quality culture in higher education, Germany.
- Hooper, D., Coughlan, J., & Mullen M. R. (2008). Structural Equation Modeling: Guidelines for Determining Model Fit. *Electronic Journal of Business Research methods*, 6(1), 53-60.<http://www.ejbrm.com>.
- Hu, L . T., Bentler, P . M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternative. *Journal of Business Research in Structural Equation Modelling*, 6 (1) 1-55.
- Kaplan, (2009). *Primary Care Guidelines for the Management of Persons Infected with Human Immunodeficiency Virus: 2009 Update by the HIV Medicine Association of the Infectious Diseases Society of America*.
- McQuitty, S. (2004). Statistical power and structural equation models in business research. *Journal of Business Research*, 57 (2) 175-183.
- Paterson, David (2008). Remarks to a Joint-Session of the New York State Legislature". Governor of New York.. Retrieved March.
- Peter Drucker (2013). "If you can't measure it, you can't manage it "Performance Management County General Services Association Burbank, California "
- Peter Drucker (2010). *Managing in the Next Society*, 2nd Global Peter Drucker-Forum. Vienna Austria.
- Peter Drucker (2010). *The Essential Drucker. The Best of Sixty Years of Peter Drucker's Writings on Management*. Posted by Roy Luebke Vienna, Austria .
- Peter Drucker (2010). "What gets measured gets managed" ("You can't manage what you can't measure")
- Springer, K. (2010). *Educational Research: A contextual approach*. John Wiley and sons, Inc.
- Stigle,J. H. (1990). Structural model evaluation and modification. *Journal of Multivariate Behavioral Research*, 25, 214-12.
- Tabachnick, B.G., Fidell, L. S. (2007). *Using Multivariate Statistics* (5th edition). New York: Allyn and Bacon.

- Velicer, W .F., & Jackson, D . N. (1990). Component Analysis Versus Common Factor-analysis Some Further Observations. *Journal of Multivariate Behavioral Research*, 25 (1), 97-114.
- Vockel, E.L., & Asher, J. W. (1995). *Educational Research*, 2nd Edition. New Jersey, Printice Hall, Inc.
- Widama, K. F. (1993). Common Factor Analysis versus Principal Component Analysis – Differential Bias in Representing Model Parameters. *Journal of Multivariate Behavioral Research*, 28 (3, 263-311).
- .Fafunwa, A. Babs, (1971). *History of Nigerian Higher Education*, Lagos, Macmillan & Co. Ltd.
- Fafunwa, A.B. (1990). Speech delivered on the occasion of the inauguration of the 5th National Universities Commission. *Education Today* March, 3, 2.
- Fan, X. & Sivo, S.A. (2007). Sensitivity of fit indices to model misspecification and model Types. *Multivariate Behavioral Research*. 42, 509-529.
- Farashuddin, M. (2005). Accreditation for quality assurance in higher education. *Panorama internet edition: The independent*.
- Federal Military Government (1974), Decree No. 1 Establishing National Universities Commission Supplement of Official Gazett.
- Federal Military Government (1974). Decree No. 1 Establishing National Universities Commission Supplement of Official Gazette 461
- Action Aid (2003), *Global Education Review*. London, Action Aid.
- National Universities Commission (1994) *Annual*
- Federal Ministry of Education (2009). *Roadmap for the Nigerian education sector*. Abuja. FME
- Federal Republic of Nigeria (2004). *National policy on education*. Lagos: NERDC.
- Federal Republic of Nigeria (2005). *Nigeria Millennium Development Goals 2005 Report*. Abuja, the National Planning Commission.
- Federal Republic of Nigeria, (1990). *National Policy on Education*, Lagos, Federal Ministry of Information.
- Federal Republic of Nigeria. (1977). *The National Policy on Education*. Lagos: Federal Press.
- innovations in the educational systems of developing countries at the 3rd Vittachi International Conference on Rethinking Educational Change at Ifrane: Morocco.
- Adams, D. (1993). *Defining Education Quality Improving Educational Quality Project* Publication, Cassell.
- Adebanjo, D. and Kehoe, D. (1999). An investigation of quality culture development in UK industry, *international journal of operations and production management*, 19, (7), pp.633-649.
- Adediji, S.O., & Bamidele, R.O. (2003). Economic Impact of Tertiary Education on Human Capital Development in Nigeria. In *Human Resource Development in Africa*. Ibadan; *the Nigerian Economic Society. Selected Papers for 2002 Annual Conference*.

- Adedipe N. O. (2007). University quality assurance, funding strategy and task allocation. A paper presented at the *workshop on tertiary education financing, university of Lagos*, April 23 – 24
- Adegbite J.G.O. (2007). The Education Reform Agenda: Challenges for tertiary education administration in Nigeria; being a paper presented at the sixth annual seminar of the *Conference of Registrars of Colleges of Education in Nigeria* (South West Zone) at the College of Education, Ikere-Ekiti, Ekiti State.
- Adesola, A. O. (1991). The Nigerian university system: Meeting the challenges of growth in a depressed economy. *Higher Education*.
- Adeyemi, T. O. (2008). Organizational climate and teachers' job performance in primary schools in Ondo state Nigeria: An analytical survey, *Asian Journal of Information Technology*, 7, (4), 138-145.
- African Union (2007). Developing an African higher education quality rating systems. Retrieved December 25, 2008 from <http://www.african-union.org>.
- Ahire, S.L., & O'Shaughnessy, K.C. (1998). The role of top management commitment in quality management: an empirical analysis of the auto parts industry", *International Journal of Quality Science*, Vol. 3 No. 1, pp. 5-37.
- Ajayi IA, Ayodele J.B. (2004). *Fundamentals of educational management*. Ado-Ekiti: Green Line Publishers.
- Ajayi, I.A. Ekundayo, H.T (2006). Funding initiatives in university education in Nigeria. Being a paper presented at the national conference of *Nigerian Association for Educational administration and Planning [NAEAP]*. Enugu State University of Science and Technology, Enugu State.
- Ajayi, T. (1997). Maintenance of Academic standards in Nigerian Schools. Some basic Planning Consideration. In Ejiogu A.M. and Ajayi, K (Eds) *Emergent Issues in Nigerian*.
- Hu, L.T., & Bentler, P.M. (1999). Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternative. *Structural Equation Modeling, A multidisciplinary Journal* 6 (1), 1-55.
- Journal of American Academy of Business*, Vol. 8, pp. 294-303.
- National Policy on Education (FGN, 2004): Federal Republic of Nigeria. Abuja, Nigeria.
- National Universities Commission (1974). Decree No. 1 of 15th January
- National Universities Commission (1989). Approved Minimum Academic Standards Documents, Abuja, and NUC July, 1989.
- National Universities Commission (Amendment Decree No. 49, 1988). National Universities Commission at (1992). *A publication of National Universities Commission*.
- National Universities Commission (Amendment Decree No. 49, 1988). National Universities Commission at (1992). *A publication of National Universities Commission*.

- National Universities Commission. (2002). Academic staffing profiles, student enrollment, dropout and graduation rates at Nigerian universities during 1995/96 to 1999/2000 academic years. Unpublished report. Abuja, Nigeria: Department of Academic Planning, *National Universities Commission*.
- National Universities Commission (2008). Monday weekly Bulletin January to December (12 months of 36 editions)
- National Universities Commission (2009). Monday weekly Bulletin January to December (12 months of 36 editions).
- National Universities Commission (2010). Monday Bulletin January to December (12 months of 36 editions).
- National Universities Commission (2011). Monday weekly Bulletin January to December (12 months of 36 editions).
- National Universities Commission (2012). Monday weekly Bulletin January to December (12 months editions).
- National Universities Commission (2013). Monday weekly Bulletin January to December (4 months 16 editions).
- Okebukola P. (2002). Quality Management in Nigerian University Education. A paper presented at the *Committee of Vice- Chancellors (CVC) Seminar*, Abuja; 9th-13th June, 2002.
- Okebukola, P. (1998). Management of Higher Education with Special Reference to Nigeria. In Juma Shabani (ed.), *Higher Education in Africa: Achievements, Challenges and Prospects*. Dakar: *UNESCO Regional Office for Africa (BREDa)*.
- Okebukola, P. (2003). Issues in funding university education in Nigeria. Monograph Series Vol. 1, No. 7. Abuja, Nigeria: *National Universities Commission*.
- Okebukola, P. (2010). Methodologies for Institutional Self-Assessment. *NUC/AAU workshop on Institutional Quality Assurance*, 6-9 April.
- Okebukola, P. et al., (2003). Unit cost of university education in Nigeria (2001 and 2002). Monograph Series Vol. 1, No. 8. Abuja, Nigeria: *National Universities Commission*.
- Okebukola, P.A.O. (2002). The state of university education in Nigeria. Abuja: *NUC*.
- Okebukola, P.A.O. (2005). Quality assurance in teacher education: the role of faculties of education in Nigerian universities. Keynote address presented at the *annual meeting of the Committee of Deans of Education in Nigerian Universities* held between 26th and 31st of July, 2005 at University of Ilorin.
- Okebukola, P.A.O. (2006). Accreditation as indicator for ranking. Paper presented at the *World Bank conference on ranking of higher education*.
- Okebukola, P.A.O. (2008b). Education Reform Imperatives for Achieving Vision 20-2020. Paper submitted to the National Education Summit organized by *the Senate Committee on Education* Abuja, December 10-11.
- Okebukola, P.A.O. (2010). The Future of University Education in Nigeria. Lagos: *Okebukola Science Foundation*.

- Okebukola, P.A.O. Shabani, J. Sambo, A, and Ramon-Yusuf, S. (2007). Quality assurance in higher education: Perspectives from Sub-Saharan Africa. In GUNI (Ed.) *State of the World report on Quality Assurance in Higher Education*, pp. 46-59, Barcelona
- Okebukola, P.A.O. Shabani, J. Sambo, A., & Ramon-Yusuf, S. (2007). Quality assurance in higher education: Perspectives from Sub-Saharan Africa. In GUNI (Ed.) *State of the World report on Quality Assurance in Higher Education*, pp. 46-59, Barcelona
- Okojie, J.A (2007). Higher education in Nigeria. Being a paper presented at Education in Africa Day, *held at House of Commons palace of Westminster*, London. Retrieved from
- Okojie, J. A. (2008). NUC Briefing document for the Honorable Minister of Education. Abuja: *NUC*
- Okojie, J.A. (2011). NUC Briefing document for the Honorable Minister of Education. Abuja: *NUC*.
- Okojie, J.A. (2012). NUC Briefing document for the Honorable Minister of Education. Abuja: *NUC*.
- Okojie, J.A. (2013). NUC Briefing document for the Honorable Minister of Education. Abuja: *NUC*.
- Okojie, J.A. (2013). Meeting with Stakeholders in Education Abuja: *NUC*
- Okojie, J.A. (2007). Higher education in Nigeria. Being a paper presented at Education in Africa Day, held at House of Commons palace of Westminster, London. Retrieved from <http://www.nucnigeriainfo/es%20houseofcommons.ppt>.
- Okonjo-Iweala, (2012). Faults Structure of Nigeria's Educational System delivering the 2012 Isaac Moghalu Foundation Leadership Lecture tagged: "Education and Development: Paradigm Shift," in Lagos. *This day live*.
- Oladapo, O. (1988). The emergence of state and private universities. In National Universities Commission Lagos (Ed.), *25 years of centralized university education in Nigeria*. Nigeria: National Universities Commission Lagos.
- Olagboye, A.A. (2004). Introduction to Educational Management in Nigeria. Published for *Kemsio Educational Consultant by Daily Graphics (Nig.)*.
- Osseo-Asare Jr, A., & Longbottom, J. (2002). The Need for Education and Training in the Use of the EFQM Model for Quality Management in UK Higher Education Institutions. *Quality Assurance in Education*, 10(1), 26-36.
- Osseo-Asare, A.E., Longbottom, D., & Chourides, P. (2007). Managerial leadership for total quality improvement in UK higher education, *The TQM Magazine*, Vol. 19, pp. 541-60.
- Owlia M S.& Aspinwall, E. M. (1997). TQM in higher education - a review, *international Journal of quality and Reliability management*, 14(5), 527-543.
- Oyebade, S. A. (2000). The funding problem in Nigerian universities and alternative approaches. *Studies in Educational Planning and Administration (SEPA)*, 1(1), 46-53.

Bojuwon, Y.B.,Hairudin,M.A. (2013). Preliminary Finding of Psychometric Properties of the Existing Quality Assurance Evaluation Model QAEM for National UniversitiesCommissions (NUC) of the Federal Republic of Nigeria. Emerging Trend for Sustainability in Global Education: Opportunities and Challenges. *GSE Journal of Education*